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RAW SEQUENCE LISTING   DATE: 08/05/2002
PATENT APPLICATION: US/09/961,400   TIME: 14:33:36

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 3 <110> APPLICANT: RYBAK, SUSANNA M.
 4         GOLDENBERG, DAVID M.
 5         NEWTON, DIANNE L.
 7 <120> TITLE OF INVENTION: IMMUNOCONJUGATES OF TOXINS DIRECTED AGAINST MALIGNANT
 8         CELLS
10 <130> FILE REFERENCE: 018733/1059
12 <140> CURRENT APPLICATION NUMBER: 09/961,400
13 <141> CURRENT FILING DATE: 2001-09-25
15 <150> PRIOR APPLICATION NUMBER: 09/622,613
16 <151> PRIOR FILING DATE: 2000-08-17
18 <150> PRIOR APPLICATION NUMBER: PCT/US99/06641
19 <151> PRIOR FILING DATE: 1999-03-26
21 <150> PRIOR APPLICATION NUMBER: 60/079,751
22 <151> PRIOR FILING DATE: 1998-03-26
24 <160> NUMBER OF SEQ ID NOS: 43
26 <170> SOFTWARE: PatentIn Ver. 2.1
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31 <213> ORGANISM: Rana pipiens
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35 <222> LOCATION: (1)..(312)
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42 gtt gac tgt aat aat atc atg tca aca aac ttg ttc cac tgc aag gac   96
43 Val Asp Cys Asn Asn Ile Met Ser Thr Asn Leu Phe His Cys Lys Asp
44              20                  25                  30
46 aag aac act ttt atc tat tca cgt cct gag cca gtg aag gcc atc tgt  144
47 Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile Cys
48          35                  40                  45
50 aaa gga att ata gcc tcc aaa aat gtg tta act acc tct gag ttt tat  192
51 Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Ser Glu Phe Tyr
52      50                  55                  60
54 ctc tct gat tgc aat gta aca agc agg cct tgc aag tat aaa tta aag  240
55 Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu Lys
56  65                  70                  75                  80
58 aaa tca act aat aca ttt tgt gta act tgt gag aat caa gct cca gta  288
59 Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro Val
60              85                  90                  95
62 cat ttc gtg ggt gtc gga cat tgc                                  312
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70 <213> ORGANISM: Rana pipiens
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74   1               5                   10                  15
76 Val Asp Cys Asn Asn Ile Met Ser Thr Asn Leu Phe His Cys Lys Asp
77              20                  25                  30   .
79 Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile Cys
80           35                  40                  45
82 Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Ser Glu Phe Tyr
83        50                  55                  60
85 Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu Lys
86   65                  70                  75                  80
88 Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro Val
89                 85                  90                  95
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98 <212> TYPE: DNA
99 <213> ORGANISM: Rana pipiens
101 <220> FEATURE:
102 <221> NAME/KEY: CDS
103 <222> LOCATION: (1)..(312)
105 <400> SEQUENCE: 3
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107 Gln Asp Trp Leu Thr Phe Gln Lys Lys His Leu Thr Asn Thr Arg Asp
108   1               5                   10                  15
110 gtt gac tgt aat aat atc ctg tca aca aac ttg ttc cac tgc aag gac    96
111 Val Asp Cys Asn Asn Ile Leu Ser Thr Asn Leu Phe His Cys Lys Asp
112              20                  25                  30
114 aag aac act ttt atc tat tca cgt cct gag cca gtg aag gcc atc tgt   144
115 Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile Cys
116           35                  40                  45
118 aaa gga att ata gcc tcc aaa aat gtg tta act acc ttt gag ttt tat   192
119 Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Phe Glu Phe Tyr
120        50                  55                  60
122 ctc tct gat tgc aat gta aca agc agg cct tgc aag tat aaa tta aag   240
123 Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu Lys
124   65                  70                  75                  80
126 aaa tca act aat aca ttt tgt gta act tgt gag aat caa gct cca gta   288
127 Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro Val
128                 85                  90                  95
130 cat ttc gtg ggt gtc gga cat tgc                                   312
131 His Phe Val Gly Val Gly His Cys
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136 <211> LENGTH: 104
137 <212> TYPE: PRT
138 <213> ORGANISM: Rana pipiens
140 <400> SEQUENCE: 4
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144 Val Asp Cys Asn Asn Ile Leu Ser Thr Asn Leu Phe His Cys Lys Asp
145   20   25   30
147 Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile Cys
148   35   40   45
150 Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Phe Glu Phe Tyr
151   50   55   60
153 Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu Lys
154   65   70   75   80
156 Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro Val
157   85   90   95
159 His Phe Val Gly Val Gly His Cys
160   100
164 <210> SEQ ID NO: 5
165 <211> LENGTH: 315
166 <212> TYPE: DNA
167 <213> ORGANISM: Rana pipiens
169 <220> FEATURE:
170 <221> NAME/KEY: CDS
171 <222> LOCATION: (1)..(315)
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176   1   5   10   15
178 gat gtt gac tgt aat aat atc atg tca aca aac ttg ttc cac tgc aag   96
179 Asp Val Asp Cys Asn Asn Ile Met Ser Thr Asn Leu Phe His Cys Lys
180   20   25   30
182 gac aag aac act ttt atc tat tca cgt cct gag cca gtg aag gcc atc   144
183 Asp Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile
184   35   40   45
186 tgt aaa gga att ata gcc tcc aaa aat gtg tta act acc tct gag ttt   192
187 Cys Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Ser Glu Phe
188   50   55   60
190 tat ctc tct gat tgc aat gta aca agc agg cct tgc aag tat aaa tta   240
191 Tyr Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu
192   65   70   75   80
194 aag aaa tca act aat aca ttt tgt gta act tgt gag aat caa gct cca   288
195 Lys Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro
196   85   90   95
198 gta cat ttc gtg ggt gtc gga cat tgc   315
199 Val His Phe Val Gly Val Gly His Cys
200   100   105

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204 <211> LENGTH: 105
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206 <213> ORGANISM: Rana pipiens
208 <400> SEQUENCE: 6
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210  1               5                   10                  15
212 Asp Val Asp Cys Asn Asn Ile Met Ser Thr Asn Leu Phe His Cys Lys
213              20                  25                  30
215 Asp Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile
216          35                  40                  45
218 Cys Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Ser Glu Phe
219      50                  55                  60
221 Tyr Leu Ser Asp Cys Asn Val Thr Ser Arg Pro Cys Lys Tyr Lys Leu
222  65                  70                  75                  80
224 Lys Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro
225                  85                  90                  95
227 Val His Phe Val Gly Val Gly His Cys
228              100                 105
232 <210> SEQ ID NO: 7
233 <211> LENGTH: 315
234 <212> TYPE: DNA
235 <213> ORGANISM: Rana pipiens
237 <220> FEATURE:
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239 <222> LOCATION: (1)..(315)
241 <400> SEQUENCE: 7
242 atg caa gac tgg ctt acg ttt cag aag aag cac ctg aca aac acc cgg    48
243 Met Gln Asp Trp Leu Thr Phe Gln Lys Lys His Leu Thr Asn Thr Arg
244  1               5                   10                  15
246 gat gtt gac tgt aat aat atc ctg tca aca aac ttg ttc cac tgc aag    96
247 Asp Val Asp Cys Asn Asn Ile Leu Ser Thr Asn Leu Phe His Cys Lys
248              20                  25                  30
250 gac aag aac act ttt atc tat tca cgt cct gag cca gtg aag gcc atc   144
251 Asp Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile
252          35                  40                  45
254 tgt aaa gga att ata gcc tcc aaa aat gtg tta act acc ttt gag ttt   192
255 Cys Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Phe Glu Phe
256      50                  55                  60
258 tat ctc tct gat tgc aat gca aca agc agg cct tgc aag tat aaa tta   240
259 Tyr Leu Ser Asp Cys Asn Ala Thr Ser Arg Pro Cys Lys Tyr Lys Leu
260  65                  70                  75                  80
262 aag aaa tca act aat aca ttt tgt gta act tgt gag aat caa gct cca   288
263 Lys Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro
264                  85                  90                  95
266 gta cat ttc gtg ggt gtc gga cat tgc                             315
267 Val His Phe Val Gly Val Gly His Cys
268              100                 105
271 <210> SEQ ID NO: 8
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273 <212> TYPE: PRT
274 <213> ORGANISM: Rana pipiens
276 <400> SEQUENCE: 8
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280 Asp Val Asp Cys Asn Asn Ile Leu Ser Thr Asn Leu Phe His Cys Lys
281              20                  25                  30
283 Asp Lys Asn Thr Phe Ile Tyr Ser Arg Pro Glu Pro Val Lys Ala Ile
284          35                  40                  45
286 Cys Lys Gly Ile Ile Ala Ser Lys Asn Val Leu Thr Thr Phe Glu Phe
287      50                  55                  60
289 Tyr Leu Ser Asp Cys Asn Ala Thr Ser Arg Pro Cys Lys Tyr Lys Leu
290 65                  70                  75                  80
292 Lys Lys Ser Thr Asn Thr Phe Cys Val Thr Cys Glu Asn Gln Ala Pro
293              85                  90                  95
295 Val His Phe Val Gly Val Gly His Cys
296              100                 105
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302 <212> TYPE: PRT
303 <213> ORGANISM: Rana pipiens
305 <400> SEQUENCE: 9
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307  1               5                  10                  15
309 His Leu Thr Asn Thr Arg Asp Val Asp Cys Asn Asn Ile Leu Ser Thr
310              20                  25                  30
312 Asn Leu Phe His Cys Lys Asp Lys Asn Thr Phe Ile Tyr Ser Arg Pro
313          35                  40                  45
315 Glu Pro Val Lys Ala Ile Cys Lys Gly Ile Ile Ala Ser Lys Asn Val
316      50                  55                  60
318 Leu Thr Thr Ser Glu Phe Tyr Leu Ser Asp Cys Asn Val Thr Ser Arg
319 65                  70                  75                  80
321 Pro Cys Lys Tyr Lys Leu Lys Lys Ser Thr Asn Thr Phe Cys Val Thr
322              85                  90                  95
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325              100                 105                 110
328 <210> SEQ ID NO: 10
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331 <213> ORGANISM: Rana pipiens
333 <220> FEATURE:
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335 <222> LOCATION: (1)..(312)
337 <400> SEQUENCE: 10
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339 Ser Asp Trp Leu Thr Phe Gln Lys Lys His Leu Thr Asn Thr Arg Asp
340  1               5                  10                  15
342 gtt gac tgt aat aat atc atg tca aca aac ttg ttc cac tgc aag gac    96
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